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RAW SEQUENCE LISTING   DATE: 05/10/2004
PATENT APPLICATION: US/09/855,170A   TIME: 10:48:49

Input Set : **N:\Crf3\RULE60\09855170A.RAW.txt**
Output Set: **N:\CRF4\05102004\I855170A.raw**

```
    1 <110> APPLICANT: Lizardi, Paul M.
    2 <120> TITLE OF INVENTION: Artificial Long Terminal Repeat Vectors
    3 <130> FILE REFERENCE: YU 125
C-->  4 <140> CURRENT APPLICATION NUMBER: US/09/855,170A
    5 <141> CURRENT FILING DATE: 2001-05-14
    6 <150> PRIOR APPLICATION NUMBER: US/09/396,340
    7 <151> PRIOR FILING DATE: 1999-09-15
    8 <150> PRIOR APPLICATION NUMBER: 60/100,305
    9 <151> PRIOR FILING DATE: 1998-09-15
   10 <160> NUMBER OF SEQ ID NOS: 9
   11 <170> SOFTWARE: PatentIn Ver. 2.1
   13 <210> SEQ ID NO: 1
   14 <211> LENGTH: 64
   15 <212> TYPE: DNA
   16 <213> ORGANISM: Artificial Sequence
   17 <220> FEATURE:
   18 <223> OTHER INFORMATION: Description of Artificial Sequence: ALTR with
   19       identical repeats and identical linkers
W--> 20 <221> NAME/KEY: misc_feature
   21 <222> LOCATION: (25)..(27)
   22 <223> OTHER INFORMATION: Linker sequence where N represents A, G, C, or T
W--> 23 <221> misc_feature
   24 <222> LOCATION: (28)..(37)
   25 <223> OTHER INFORMATION: DNA insert where N represents A, G, C, or T
W--> 26 <221> misc_feature
   27 <222> LOCATION: (38)..(40)
   28 <223> OTHER INFORMATION: Linker Sequence where N represents A, G, C, or T
W--> 29 <400> 1
W--> 30       aggtaggtag gtaggtaggt aggtnnnnnn nnnnnnnnnn acctacctac ctacctacct 60
   31       acct                                                              64
   33 <210> SEQ ID NO: 2
   34 <211> LENGTH: 64
   35 <212> TYPE: DNA
   36 <213> ORGANISM: Artificial Sequence
   37 <220> FEATURE:
   38 <223> OTHER INFORMATION: Description of Artificial Sequence: ALTR with
   39       identical repeats and different linkers
W--> 40 <221> NAME/KEY: misc_feature
   41 <222> LOCATION: (25)..(27)
   42 <223> OTHER INFORMATION: Linker Sequence where N represents A, G, C, or T
W--> 43 <221> misc_feature
   44 <222> LOCATION: (28)..(37)
   45 <223> OTHER INFORMATION: DNA insert where N represents A, G, C, or T
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```
W--> 46 <221> misc_feature
     47 <222> LOCATION: (38)..(40)
     48 <223> OTHER INFORMATION: Linker Sequence where N represents A, G, C, or T
W--> 49 <400> 2
W--> 50       aggtaggtag gtaggtaggt aggtnnnnnn nnnnnnnnnn acctacctac ctacctacct 60
     51       acct                                                              64
     53 <210> SEQ ID NO: 3
     54 <211> LENGTH: 64
     55 <212> TYPE: DNA
     56 <213> ORGANISM: Artificial Sequence
     57 <220> FEATURE:
     58 <223> OTHER INFORMATION: Description of Artificial Sequence: ALTR with two
     59       types of ALTR repeats and different linkers
W--> 60 <221> NAME/KEY: misc_feature
     61 <222> LOCATION: (25)..(27)
     62 <223> OTHER INFORMATION: Linker Sequence where N represents A, G, C, or T
W--> 63 <221> misc_feature
     64 <222> LOCATION: (28)..(37)
     65 <223> OTHER INFORMATION: DNA insert where N represents A, G, C, or T
W--> 66 <221> misc_feature
     67 <222> LOCATION: (38)..(40)
     68 <223> OTHER INFORMATION: Linker Sequence where N represents A, G, C, or T
W--> 69 <400> 3
W--> 70       aggtaggtag gtaggtaggt aggtnnnnnn nnnnnnnnnn gatggatgga tggatggatg 60
     71       gatg                                                              64
     73 <210> SEQ ID NO: 4
     74 <211> LENGTH: 34
     75 <212> TYPE: DNA
     76 <213> ORGANISM: Artificial Sequence
     77 <220> FEATURE:
     78 <223> OTHER INFORMATION: Description of Artificial Sequence: Repeat A
     79 <400> SEQUENCE: 4
     80       acgcagctcg tgtaatacga ctcgcatgcc tccc                              34
     82 <210> SEQ ID NO: 5
     83 <211> LENGTH: 22
     84 <212> TYPE: DNA
     85 <213> ORGANISM: Artificial Sequence
     86 <220> FEATURE:
     87 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer A
     88 <400> SEQUENCE: 5
     89       cgcagctcgt gtaatacgac tc                                           22
     91 <210> SEQ ID NO: 6
     92 <211> LENGTH: 34
     93 <212> TYPE: DNA
     94 <213> ORGANISM: Artificial Sequence
     95 <220> FEATURE:
     96 <223> OTHER INFORMATION: Description of Artificial Sequence: Repeat B
     97 <400> SEQUENCE: 6
     98       atgcatgctc agtggtgctg agtaacagcc tggg                              34
```

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Input Set : N:\Crf3\RULE60\09855170A.RAW.txt
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```
        100 <210> SEQ ID NO: 7
        101 <211> LENGTH: 22
        102 <212> TYPE: DNA
        103 <213> ORGANISM: Artificial Sequence
        104 <220> FEATURE:
        105 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer B
        106 <400> SEQUENCE: 7
        107       ggctgttact cagcaccact ga                                    22
        109 <210> SEQ ID NO: 8
        110 <211> LENGTH: 75
        111 <212> TYPE: DNA
        112 <213> ORGANISM: Artificial Sequence
        113 <220> FEATURE:
        114 <223> OTHER INFORMATION: Description of Artificial Sequence: Left side of
        115       ALTR vector
W-->    116 <221> NAME/KEY: misc_feature
        117 <222> LOCATION: (69)..(75)
        118 <223> OTHER INFORMATION: Insert and polylinker sequences where N represents
        119       A, G, C, or T
W-->    120 <400> 8
        121       acgcagctcg tgtaatacga ctcgcatgcc tcccacgcag ctcgtgtaat acgactcgca 60
W-->    122       tgcctcccnn nnnnn                                              75
        124 <210> SEQ ID NO: 9
        125 <211> LENGTH: 75
        126 <212> TYPE: DNA
        127 <213> ORGANISM: Artificial Sequence
        128 <220> FEATURE:
        129 <223> OTHER INFORMATION: Description of Artificial Sequence: Right side of
        130       ALTR vector
W-->    131 <221> NAME/KEY: misc_feature
        132 <222> LOCATION: (1)..(7)
        133 <223> OTHER INFORMATION: Insert and Polylinker Sequences where N represents
        134       A, G, C, or T
W-->    135 <400> 9
W-->    136       nnnnnnnggg atgcatgctc agtggtgctg agtaacagcc tgggatgcat gctcagtggt 60
        137       gctgagtaac agcct                                             75
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 05/10/2004
PATENT APPLICATION: **US/09/855,170A**   TIME: 10:48:50

Input Set : **N:\Crf3\RULE60\09855170A.RAW.txt**
Output Set: **N:\CRF4\05102004\I855170A.raw**

<u>Please Note:</u>
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40
Seq#:2; N Pos. 25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40
Seq#:3; N Pos. 25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40
Seq#:8; N Pos. 69,70,71,72,73,74,75
Seq#:9; N Pos. 1,2,3,4,5,6,7

VERIFICATION SUMMARY   DATE: 05/10/2004
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Input Set : **N:\Crf3\RULE60\09855170A.RAW.txt**
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```
L:4 M:270 C: Current Application Number differs, Wrong Format
L:20 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:23 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:26 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:29 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:30 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:40 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:43 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:46 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:49 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:60 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:63 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:66 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:69 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:70 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:116 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:120 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8
L:122 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:60
L:131 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:135 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:9
L:136 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
```